

Valley students putting vehicles to the test in Super Mileage Challenge

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— Getting 1,000 miles per gallon of gasoline is a pipe dream for most motorists. But for teams of technology students from Terre Haute South Vigo, Sullivan, North Vermillion and 37 other high schools from around the state, the 1,000 mpg mark is merely average.

Some of the top teams could crack 1,500 mpg at Monday's IMSTEA Super Mileage Challenge at O'Reilly Raceway Park in Indianapolis. The annual competition begins at 8 a.m.

South, Sullivan and North Vermillion are among 40 Indiana high schools that have entered 60 cars in the three classes of competition.

The students build their own cars under the supervision of a faculty member. They are responsible for the design and construction of the car and for raising all funds needed for the project. Briggs & Stratton Corp. furnishes the engines, but all other items either must be purchased or donated by sponsors. The students not only learn the technical and scientific aspects of building a high-mileage car, but also they learn how to work as a team and solve complex problems.

To be eligible to compete, each school must submit a detailed technical proposal covering all aspects of the design and construction of the car. Such things as aerodynamic drag, friction forces, braking forces and cornering forces must be calculated and discussed in detail. The proposal ensures that the students are exposed to the scientific principles of high mileage as well as the technology of building the car. These students are the future scientists, engineers and technicians who will be designing, building and servicing more fuel-efficient cars of the future.

In the competition, the Stock class allows no modification to the engine and will have 28 cars. Unlimited class allows engine modifications and will have 27 entries. A new category this year is the Experimental Class, which will feature cars powered by diesel fuel, batteries and hydrogen. Five cars are entered in this class. The Super Mileage Challenge is conducted under the auspices of the Indiana Mathematics, Science and Technology Education Alliance. IMSTEA is a non-profit, educational organization composed of teachers, administrators, business people and concerned citizens. It is dedicated to improving the technological literacy and competence of Indiana's citizens.

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